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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,700	12/02/2004	Tomonao Kawashima	OOCL-188 (PC-P1821US)	6889

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EXAMINER	
BOR, HELENE CATHERINE	
ART UNIT	PAPER NUMBER
3768	
MAIL DATE	DELIVERY MODE
07/11/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/516,700	KAWASHIMA ET AL.	
	Examiner	Art Unit	
	HELENE BOR	3768	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 April 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8, 12-22, 24-26 & 28-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 December 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *03/05/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 1-8, 12-15, 19-22, 24-26 & 28-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Strommer et al. (US Patent Application No. 2002/0049375 A1).

Claim 1, 4 &19: Strommer teaches an ultrasonic diagnostic apparatus obtaining plural ultrasonic tomographic images at a process that an ultrasonic probe moves and scans within a body cavity of a body to be examined (Page 4, Para 0038). Strommer teaches the apparatus comprising position information detecting means for detecting three dimensional position information of plural ultrasonic tomographic images obtained in a process that the ultrasonic probe moves within a body cavity of a body to be examined (Page 3, Para 0031 & 0037). Strommer teaches tomographic parallel images constructing means for constructing plural tomographic parallel images arranged along a non-linear scan path of the ultrasonic probe based on the position information obtained by the three dimensional position information detecting means (Page 4, Para 0044).

Claim 2, 5-6, 20, 22 & 24: Strommer teaches an ultrasonic diagnostic apparatus further comprising display control means for causing display means to display the ultrasonic tomographic image and the tomographic parallel images so as to compare (Figure 22, Element 836, 834 & 838).

Claim 3 & 13-14: Strommer teaches an ultrasonic diagnostic apparatus, wherein the tomographic parallel images constructing means constructs new tomographic parallel images by overwriting pixels corresponding to the tomographic parallel images with the pixels corresponding to the ultrasonic tomographic image every time when the ultrasonic tomographic image is created in the process that the ultrasonic probe moves and scans three dimensional within a body cavity of a body to be examined (Page 10, Para 0143).

Claim 7: Strommer teaches an ultrasonic diagnostic apparatus, wherein the display means displays on the tomographic parallel images an ultrasonic tomographic image marker indicating a position of the ultrasonic tomographic image (Figure 16C, Element 768).

Claim 8, 21, 25, 28 & 30-32: Strommer teaches an ultrasonic diagnostic apparatus, further comprising ultrasonic tomographic image marker setting means for setting a position of the ultrasonic tomographic image marker, wherein the display means selects and displays the ultrasonic tomographic image in accordance with a position of the ultrasonic tomographic image marker set by the ultrasonic tomographic image marker setting means (Page 18, Para 0247, Figure 25A, Element 95_{1-4}).

Claim 12, 26 & 29: Strommer teaches an ultrasonic diagnostic apparatus,

wherein the display means displays the tomographic parallel images and an indicator indicating a direction of the tomographic parallel images with respect to the position and direction detecting means [location, orientation and trajectory] (Page 19, Para 0260 & Figure 20, Element +).

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claim 15-16 & 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strommer et al. (US Patent Application No. 2002/0049375 A1) as applied to claim 1-8, 12-15, 19-22, 24-26 & 28-32 above, and further in view of Tanaka (US Patent No. 5,680,865).

Claim 15 & 16: Strommer teaches an ultrasonic diagnostic apparatus, wherein the ultrasonic probe constitutes a mechanical radial scan type ultrasonic endoscope performing radial scanning (Claim 17 & Page 5, Para 0048). Strommer fails to specify whether the radial scan is mechanical or electric. However, Tanaka teaches that both mechanical and electric radial scans are known alternative expedients in the art of radial ultrasonic scanning (Col. 1, Line 32-35). It would have been obvious to one of ordinary skill in the art to modify the system of Strommer to use either mechanical or electric radial scanning as taught by Takana for the radial scanning a both are known alternative expedients in the art of ultrasound radial scanning (Col. 1, Line 32-35).

Claim 18: Strommer teaches that the radial ultrasound system can be replaced with alternative ultrasound systems (Page 8, Para 0128) but Strommer fails to

teach the specific use of convex scanning. However, Tanaka teaches there are many known scanning modes: linear, sectoral, radial or convex (Col. 1, Line 25-31) and the modes are known alternative expedients in the art of ultrasonic scanning (Col. 1, Line 25-31). It would have been obvious to one of ordinary skill in the art to modify the system of Strommer to use either radial or convex scanning as taught by Tanaka as both are known alternative expedients in the art of ultrasound scanning (Col. 1, Line 25-31).

5. Claim 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strommer et al. (US Patent Application No. 2002/0049375 A1) as applied to claim 1-8, 12-16, 19-22, 24-26 & 28-32 above, and further in view of Lewkowicz et al. (US Patent Application No.2003/0114742 A1).

Claim 17: Strommer teaches that the radial ultrasound system can be replaced with alternative ultrasound systems (Page 8, Para 0128) but Strommer fails to teach the specific use of wherein the ultrasonic probe constitutes a capsule ultrasonic endoscope. However, Lewkowicz teaches that endoscopes and swallowable capsules are known alternative expedients in the art of in-vivo ultrasonic scanning (Page 2, Para 0020). It would have been obvious to one of ordinary skill in the art to modify the system of Strommer to use a casule embodiment for the endoscope shape as taught by Lewkowicz as both are known alternative expedients in the art of ultrasound radial scanning (Page 2, Para 0020).

Response to Arguments

6. Applicant's arguments, see Page 14, filed 04/04/2008, with respect to the Title objection have been fully considered and are persuasive. The objection of the Title has been withdrawn.

7. Applicant's arguments, see Page 15, filed 04/04/2008, with respect to the rejection(s) of claim(s) 1-32 under 102(b) and 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Strommer et al. (US Patent Application No. 2002/0049375 A1) and further in view of Tanaka (US Patent No. 5,680,865) and further in view of Lewkowicz et al. (US Patent Application No.2003/0114742 A1). The action is made final necessitated by amendment.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HELENE BOR whose telephone number is (571)272-2947. The examiner can normally be reached on M-T 8:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. B./
Examiner, Art Unit 3768

/Eric F Winakur/
Primary Examiner, Art Unit 3768